

ABSTRACT OF THE DISCLOSURE

An RF mixer provides extended dynamic range with reduced noise by utilizing degeneration inductors in the RF input section of a doubly balanced mixer. Degeneration inductors are also utilized in a mixer having a class AB input section. A current mirror in the class AB input section is also inductively degenerated for further noise reduction. The input section is biased by an all-NPN bandgap reference cell which is tightly integrated into the input section so as to reduce the power supply voltage required for the reference cell. The mixer can be optimized for wide input voltage ranges or low distortion.

10

002010-16331300